

FINDING OF NO SIGNIFICANT IMPACT
REDEVELOPMENT OF THE OLD POST OFFICE BUILDING

FINDING

In accordance with the National Environmental Policy Act (NEPA), Council on Environmental Quality Regulations for Implementing NEPA (40 CFR §§ 1500-1508), U.S. General Services Administration (GSA) Order ADM 1095.1 F: Environmental Considerations in Decision Making, and the GSA Public Buildings Service NEPA Desk Guide, it was been determined that the proposed action, as described in the attached Environmental Assessment (EA), is not a major Federal action significantly affecting the quality of the natural and human environment. Therefore, an Environmental Impact Statement will not be prepared for the redevelopment of the Old Post Office Building.

This FONSI will become final 30 days after publication of its Notice of Availability in the Washington Post provided that no information leading to a contrary finding is received or identified during the 30-day review period.

APPROVED: _____

(b) (6)

Date: _____

05/10/2013

Julia E. Hudson
Regional Administrator
National Capital Region
U.S. General Services Administration

APPROVED: _____

(b) (6)

Date: _____

May 16, 2013

Dorothy Robyn
Commissioner
Public Buildings Service
U.S. General Services Administration

I. BASIS FOR FINDING.

GSA prepared an environmental assessment (EA) analyzing the direct and indirect environmental impacts that could result from the redevelopment of the Old Post Office Building (OPO). The EA was prepared pursuant to the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality Regulations for Implementing NEPA (40 CFR §§ 1500-1508), GSA Order ADM 1095.1 F: Environmental Considerations in Decision Making, and the GSA Public Buildings Service NEPA Desk Guide. The EA documents the potential direct, indirect, and cumulative impacts for an action alternative and a no action alternative.

The environmental issues addressed in the EA were identified through early public involvement (scoping), which included consultations with Federal and local agencies and other stakeholders. In addition to scoping, a Draft EA was distributed for a 30-day public review period. The Final EA responds to comments and concerns received during the 30-day comment period for the Draft EA. The Final EA is incorporated by reference into this Finding of No Significant Impact (FONSI).

II. PURPOSE OF AND NEED FOR THE PROPOSED ACTION.

The purpose and need for the proposed action is to comply with the OPO Redevelopment Act of 2008 (Public Law [PL] 110-359), which directs the GSA Administrator to proceed with the redevelopment of the OPO. As stated in PL110-359, redevelopment of OPO would preserve the building's historic integrity and provide a lucrative financial return to the Government.

In order to meet the directive in PL 110-359, GSA has solicited proposals from the private sector for the redevelopment of the OPO. In addition to objectives of the legislation, GSA identified in their request for proposals the following goals:

- Leverage the expertise of the real estate industry to reposition the OPO as a viable asset;
- Provide for public access; and
- Contribute to the vitality of Pennsylvania Avenue, the Federal Triangle, and the District of Columbia

III. DESCRIPTION OF ALTERNATIVES.

Two alternatives were considered in detail in this EA: an action alternative and a no action alternative. These alternatives are summarized below. The alternatives are described in greater detail in Chapter 2 of the Final EA.

No Action Alternative: Under the no action alternative, redevelopment of the OPO would not take place. The existing facilities would remain and the current operation of the OPO as office and retail space would continue. Repairs and upkeep would continue in accordance with the existing maintenance plan for the site.

Action Alternative: Under the action alternative, the OPO would be redeveloped as a mixed-use luxury hotel and conference facility. The facility would provide 415,000 gross square feet, which includes approximately 267 hotel rooms and suites, museum space,

restaurants, retail spaces, a bar/lounge area, exhibition gallery, library and seating area, spa and health club, gift shop, ballroom, and conference space. The C Street plaza area would be redesigned to accommodate a sidewalk café and more graceful public entrance into the OPO.

The redevelopment would include the introduction of a driveway within the closed historic 11th Street Right of Way. Inclusive with the introduction of the driveway is signal modification of the 11th Street, NW, and Pennsylvania Avenue, NW, intersection, curb cut, and signage. Additionally, sidewalk cafés are proposed along Pennsylvania Avenue. The redevelopment proposes actions on a portion of land currently under the jurisdiction of National Park Service (NPS); specifically those actions are the introduction of the driveway within the closed historic 11th Street Right of Way and sidewalk cafés on Pennsylvania Avenue, NW. The action alternative includes the transfer of jurisdiction from NPS to GSA for a portion of space along Pennsylvania Avenue required for the sidewalk cafes and 11th Street driveway. A description of the area to be transferred from NPS to GSA is included in the Final EA.

To accomplish the redevelopment of the OPO, GSA would sign a lease agreement with the preferred selected developer for the redevelopment. The action alternative as described in more detail in the Final EA represents the redevelopment program of the preferred selected developer.

IV. ACTIONS SELECTED FOR IMPLEMENTATION.

GSA has selected to implement the action alternative, which will be accomplished by entering into a lease agreement with the preferred selected developer. GSA has selected the action alternative because it best meets the purpose and need for the proposed action.

V. ENVIRONMENTAL CONSEQUENCES.

The EA analyzed the impacts of each of the alternatives on the natural and human environment. This section summarizes the direct and indirect impacts associated with the alternative selected for implementation. A full description of the impacts can be found in the Final EA. This section also identifies mitigation measures for the resource issues that were analyzed in detail.

In addition to the resource issues summarized below, a number of issues were considered for evaluation at the outset of the process, but were eliminated from detailed study within the EA because either there would be no impacts or impacts would be negligible. Resource issues dismissed from detailed study include: Community Facilities, Climate Change, Demographics and Environmental Justice, Hazardous Materials, Geology, Topography and Soils, Noise, Water Resources, and Wildlife.

Land Use: Overall, the redevelopment of the OPO would result in beneficial direct long-term impacts on land uses of the site, including the clock tower, and negligible, indirect and direct, adverse, long-term, impacts on nearby NPS public land uses, including the use of the Pennsylvania Avenue Historic Site, the Mall, and the Navy Memorial. As a

result of the potential changes to hotel and retail uses, there would be minor indirect impacts on land use from the action alternative.

The redevelopment proposes actions on a portion of land currently under the jurisdiction of NPS; specifically those actions are the introduction of the driveway within the closed historic 11th Street Right of Way and sidewalk cafés on Pennsylvania Avenue, NW.

Mitigation Measures

Redevelopment activities proposed for land currently under NPS jurisdiction would first require a transfer of jurisdiction from NPS to GSA. The exact area of land to be transferred from NPS to GSA will be determined by NPS. It is anticipated that at a minimum it will include the area along Pennsylvania Avenue proposed for sidewalk cafes and for the 11th Street Driveway.

GSA and NPS would coordinate on the process and covenants that will be required for the transfer of jurisdiction associated with the redevelopment of the OPO.

Concerning the Clock Tower, the most recent agreement between NPS and GSA became effective on February 27, 2013 with its execution by GSA. GSA and NPS will continue to comply with PL 98-1 by entering into these agreements.

Planning Policies: Overall, the action alternative would result in beneficial impacts on local plans and policies. The proposed redevelopment would result in specific beneficial impacts from compliance with Executive Order 13514, and consistency with the policies contained in the *Federal and District Elements of the Comprehensive Plan for the National Capital* and the *Monumental Core Framework Plan* that promote the sustainability, economic development, and vibrancy of the Pennsylvania Avenue Corridor. The proposed action is not inconsistent with the Pennsylvania Avenue Development Corporation (PADC) Pennsylvania Avenue Plan and General Guidelines at 36 CFR Part 910. There would also be minor adverse impacts on local plans and policies due to the introduction of a curb cut along Pennsylvania Avenue at 11th Street and the removal of existing trees. When considered with other past, present, or future projects in the vicinity, minor and beneficial cumulative impacts on planning policies are anticipated.

Mitigation Measures

The preferred selected developer will coordinate, as required, with District Department of Transportation's (DDOT) Urban Forestry Administration regarding the removal of trees on the site that exceed 55 inches or more in circumference.

Any changes to the area covered by the PADC Pennsylvania Avenue Plan and requirements will be considered through the process in the 1996 National Capital Planning Commission (NCPC), GSA, and NPS Memorandum of Agreement (MOA) to determine whether the Plan needs to be amended.

Public Space: Overall, there would be minor adverse long-term impacts to pedestrian amenities through the introduction of the 11th Street driveway, which would remove the pedestrian plaza between OPO and the Internal Revenue Service Building. Beneficial impacts would result from the activation of the C Street Plaza, the removal of perimeter security planters in front of the OPO along the Pennsylvania Avenue sidewalk, and the removal of the glass and steel structure in the C Street Plaza. Additionally, minor cumulative impacts to public space are expected.

Mitigation Measures

The preferred selected developer will coordinate with DDOT throughout the design process to ensure compliance with their *Design and Engineering Manual* and *Public Realm Design Handbook*. The preferred selected developer would be responsible for obtaining public space permits for activities conducted in public space under DDOT jurisdiction.

GSA is in the process of completing the closure of a portion of C Street, NW, which was initiated in 1986. However, pending formal closure of C Street, the preferred selected developer will be required to obtain a public space permit for activities in the portion of C Street, NW, under DDOT's jurisdiction.

The preferred selected developer, along with GSA, would coordinate with appropriate law enforcement agencies to determine necessary security measures for the Clock Tower.

GSA, along with the preferred selected developer would consult with NPS regarding any proposed future changes to the Pennsylvania Avenue streetscape and sidewalks to ensure consistency with the NPS' overall planning and desired objectives for the Pennsylvania Avenue corridor.

Socioeconomics: Short-term minor adverse socioeconomic impacts could occur as a result of the disruption as businesses transition between locations. Overall, the action alternative would have a long-term beneficial impact on economic and fiscal resources.

Mitigation Measures

GSA will facilitate the relocation of Federal agency tenants of the OPO to other locations within Washington, DC.

Historic Resources: See Section VI: Section 106 of the National Historic Preservation Act.

Archaeological Resources: See Section VI: Section 106 of the National Historic Preservation Act.

Visual Resources: Overall the redevelopment of the OPO would result in minor to moderate, long-term adverse impacts to visual resources. Cumulatively, there would be

minor impacts on visual resources along Pennsylvania Avenue and 12th Street, and minor-to-moderate views along 11th Street.

Pennsylvania Avenue, NW Views: Given the visual break of the intersection of Pennsylvania Avenue and 11th Street, the removal of street trees, and the low height of the signage and outdoor dining in contrast to the broad roadway and height of buildings and their location at the edge of the viewshed, the action alternative would result in minor adverse, long-term, impacts to views along Pennsylvania Avenue, NW.

12th Street, NW Views: Given the low height of the outdoor dining features in the C Street Plaza in contrast to the height of buildings and their location at the edge of the viewshed, and the existing windows at the south side of the OPO Building, the action alternative would result in minor, long-term, adverse impacts on views along 12th Street, NW.

11th Street, NW Views: The 11th Street, NW, viewshed character looking south from downtown would remain that of a roadway defined by mid-rise buildings. However, the terminus point would be altered from filtered views of the Annex, Internal Revenue Service (IRS) Building, and pedestrian plaza, to a driveway with landscape features and more open views of the Annex and IRS Building. The view corridor would appear deeper due to the removal of trees and the addition of the linear driveway. The window awnings along 11th Street would be minimally visible, but due to their relatively small size, would not noticeably intrude into the visual corridor, similar to existing conditions. The roof windows would be visible, but would not distract views along the view corridor due to their placement at the central and southern portions of the building. As a result, there would be minor to moderate impacts, depending upon the design of the entry canopy and the Annex façade to views along 11th Street, NW.

Mitigation Measures

The preferred selected developer would, as the design develops, continue to seek to minimize impacts to viewsheds and would take into consideration the following:

- Elements within the viewshed, such as outdoor dining tables and chairs, signage, and especially entry canopies, should be carefully designed to complement the architecture and should be placed close to the building, to the extent possible. In the area along Pennsylvania Avenue, as applicable, these must conform to PADC's Pennsylvania Avenue Plan or otherwise approved through the plan amendment process under the 1996 NCPC, GSA, and NPS MOA.
- Signage used at the OPO should be low and unobtrusive, and consist of materials that are in keeping with the built environment at the site or sensitive to the architectural design. In the area along Pennsylvania Avenue within PADC boundaries, it must conform to PADC's Pennsylvania Avenue Plan or otherwise be approved through the plan amendment process under the 1996 NCPC, GSA, and NPS MOA.
- At the 11th Street driveway, new signage should also be located low to the ground.

The conceptual design for the signage and streetscape elements will be refined through coordination with review agencies, including the Commission of Fine Arts (CFA), the DC State Historic Preservation Office (SHPO), NCPCH, and, as appropriate, for the PADC Pennsylvania Avenue Plan, NPS.

Vegetation: Overall, impacts to existing vegetation would be minor, long-term and adverse due to the removal of plaza and street trees and landscaping, impacts would be offset by the inclusion of trees in the C Street Plaza design, and the installation of a green roof on the Annex.

Mitigation Measures

The preferred selected developer will coordinate with the DDOT's Urban Forestry Administration to obtain, as necessary, Urban Forestry Administration's Special Tree Removal Permit. Where feasible, the developer would seek to preserve additional mature trees, or incorporate more trees into the design as it progresses.

Stormwater Management: The redevelopment of the OPO would result in minor, short-term adverse impacts and long-term beneficial impacts to stormwater management.

The redevelopment would result in over 5,000 square feet of disturbance and a stormwater management plan will be developed for the project. Given the already disturbed nature of the site and lack of existing stormwater management controls, the implementation of a stormwater management plan would result in long-term beneficial impacts to stormwater.

Minor short-term construction-related impacts to stormwater due to increased sediment in stormwater runoff are anticipated; however, this would be minimized by implementing best management practices.

Mitigation Measures

During construction, the preferred selected developer would employ best management practices to minimize sediment loads in stormwater runoff and to protect water quality. The preferred selected developer will coordinate the development of a sediment and erosion control plan with the District Department of the Environment (DDOE).

The preferred selected developer will follow guidance provided in GSA's P100: Facilities Standards for Public Buildings Service for the development of the stormwater management plan, including designing the plan as per Section 438 of the Energy Independence and Security Act of 2007 and coordination of the plan with local authorities, which would include DDOE.

The preferred selected developer will consult with DC Water and DDOT prior to any relocation or reconstruction of existing storm drains or storm sewers that could be required during construction activities at the site.

Floodplains: The OPO is located within a high risk flood zone—Special Flood Hazard Areas or 100-year floodplain—designated as Zone AE in accordance with the Federal Emergency Management Agency Flood Insurance Rate Map, effective date September 27, 2010.

Because the proposed action is located within a 100-year floodplain, compliance with Executive Order (EO) 11988: Floodplain Management and Protection is required. Compliance with EO 11988 is accomplished through completion of the eight-step process as outlined in GSA's Floodplain Management Desk Guide. The eight-step process requires GSA to evaluate alternatives to locating in the floodplain, analyze impacts to floodplain values and to life and property, and identify measures that would be implemented to minimize threats to life and property and floodplain values. The Final EA provides a detailed description of GSA's compliance with the eight-step process. Through the eight-step process, GSA has determined that there is no practicable alternative to locating the proposed action in the 100-year floodplain and the FONSI documents the measures that would be undertaken to minimize threats to life and property and floodplain values. Public notification of this FONSI is step seven of the eight-step process, implementing the action would be step eight.

Because the site is already developed, there would be no net loss of the beneficial or natural values of the floodplain from redevelopment of the OPO. Therefore, indirect and direct impacts to floodplains would be negligible. Plans for the redevelopment locate non-occupational functions of the hotel and conference space below the flood elevation, therefore impacts to life and property are also anticipated to be negligible.

Mitigation Measures

Through the redevelopment of the OPO, the preferred selected developer would disconnect the utilities that are currently fed from the IRS Building; disconnection from IRS Building eliminates a flood pathway to the site and minimizes threats to life and property at the site. Additional measures to minimize threats to life and property will be accomplished through locating guest rooms at first floor level or higher and installing measures to limit water infiltration of the mechanical equipment. Additional information regarding the measures to be taken for the mechanical equipment can be found in the Final EA.

Additionally, the preferred selected developer will implement a stormwater management plan and decrease impervious surfaces at the site, thereby increasing absorption of stormwater runoff and enhancing the natural values of the floodplain.

Air Quality: Overall, the action alternative would result in negligible short-term and long-term impacts to air quality. Under the action alternative, the majority of construction is restricted to indoor renovation activities, which are anticipated to generate negligible nonattainment emissions well below the applicable *de minimis* thresholds. Therefore, a formal conformity determination is not required. Given the projected minimal increase to peak period trips and projected minimal change in congestion, it is anticipated that the proposed action would not cause a noticeable hot

spot concentration impact for both carbon monoxide and particulate matter. As a result, there would be negligible long-term impacts on air quality. Short-term minor impacts during construction may occur from fugitive dust and use of diesel-powered equipment.

Mitigation Measures

The preferred selected developer would employ best management practices during construction to control fugitive dust.

Vehicular Transportation: Under the action alternative, a new south leg at the intersection of 11th Street, NW, and Pennsylvania Avenue, NW, would be created that would affect traffic operations in the area. Reconfiguration of the intersection may require the installation or modification of traffic control devices in Pennsylvania Avenue right of way under NPS jurisdiction. The redevelopment would only minimally impact the level of service (LOS) at the study intersections. The five other intersections located in the project vicinity, which have no proposed physical changes, will have small increases in traffic volumes, but would not experience a degradation of LOS. Overall, the small number of new vehicle trips generated by the proposed action would have negligible effects on the total trips on local roadways. As a result, there would be minor, long-term, adverse impacts on vehicular traffic.

Mitigation Measures

The preferred selected developer will, during the public space permitting process:

- Closely coordinate with DDOT the design and construction of the proposed alignment, curb cut, and associated modifications to traffic control devices at Pennsylvania Avenue, NW, and 11th Streets, NW, intersection.
- Develop a transportation management program (TMP) that offers employees of the site alternative modes of transportation and coordinate with DDOT the specifics of the transportation demand management program in order to tailor the TMP to the finalized land use program.
- To discourage employees commuting to work in single occupant vehicles, the preferred selected developer would restrict parking to valet parking, and only provide a limited number of parking spaces to employees (up to 5).
- The preferred selected developer would charge a fee to hotel visitors and guests for valet parking.

Reconfiguration of the intersection may require traffic control devices to be installed or modified on land along Pennsylvania Avenue (south and north sides) that is under NPS jurisdiction. GSA, along with the preferred selected developer, would coordinate with NPS regarding any necessary permits for traffic control devices located on land that is under NPS jurisdiction, but outside the area to be transferred from NPS to GSA.

Pedestrian and Bicycle Circulation: Minor, long-term adverse impacts to pedestrian circulation and bicycle use would occur under the action alternative with the introduction of a new conflict point between pedestrians and vehicles at Pennsylvania Avenue, NW, at 11th Street, NW, the removal of the adjacent pedestrian plaza, and the removal of the bicycle rental kiosk. Adverse impacts would be offset by the beneficial impacts that

would occur because of the improved accessible pedestrian access, removal of security screening requirements, and opening all of the OPO entrances to the public. When considered with other past, present or future projects in the vicinity, minor cumulative impacts on pedestrian and bicycle circulation are anticipated.

Mitigation Measures

After the NPS transfer to GSA, GSA and the preferred selected developer would:

- Design the intersection with DDOT standards and fully-accessible ramps.
- Work with DDOT to design the intersection and curb cut to provide for the safe and efficient movement of vehicles and pedestrians at the 11th Street entrance to the Old Post Office.
- Modify the traffic signal at 11th Street, NW, and Pennsylvania Avenue, NW, to include pedestrian signal heads and Audible Pedestrian Signals for the south leg.
- Explore the possibility of including bicycle parking at key locations along the perimeter of the Old Post Office to align with the *District of Columbia Pedestrian Master Plan* goal to provide bicycle parking/storage facilities.
- Include covered bicycle storage as well as shower rooms inside the building.

Public Transit: Overall, minor adverse impacts to public transit are anticipated under the action alternative. The preferred selected developer would seek to relocate the bus stop on Pennsylvania Avenue directly in front of the main OPO Building entrance further east, closer to 10th Street, NW. However, over the long-term it is anticipated that the relocation of the bus stops would reduce conflicts between pedestrians, vehicles and busses and would have an overall beneficial impact. It is anticipated that a number of visitors would arrive via transit, similar to the use patterns of existing employees at the OPO and current visitors. However, visits to the hotel would occur at more off-peak and weekend hours, as opposed to the current office land use with employees whose commutes occur primarily at the morning and afternoon peak hours. Weekend and off-peak transit trips would be easily accommodated by the available capacity of the transit system.

Mitigation Measures

The preferred selected developer would:

- Work with Washington Metropolitan Area Transit Authority's (WMATA) Bus Planning Department and DDOT's transit coordinator to establish the feasibility of relocating or consolidating the affected bus stops, which should be appropriately located.
- Include necessary bus stop amenities.
- Coordinate with WMATA and DDOT on the relocation of any existing bus stops during the construction phase. The preferred selected developer will contact each agency at least two weeks before the start of the actual construction work to ensure that bus customers are notified of the project before work begins.

Parking: The redevelopment of the OPO would attract a minor number of additional vehicles to the site. Although the action alternative would create up to 150 valet parking spaces in the basement floor of the OPO Annex, some additional parking may be

needed. It is anticipated that nearby street parking or parking garages in the vicinity of the OPO would accommodate the additional need. As a result, there would be minor adverse impacts on parking.

Mitigation Measures

The preferred selected developer would charge a fee to hotel visitors and guests for valet parking. The preferred selected developer would restrict parking to valet parking, and only provide a limited number of parking spaces to employees (up to 5). These measures would encourage the use of public transit, and decrease demand on parking.

Utilities: Overall, short-term minor impacts to utilities would occur during construction activities and the disconnection from the IRS Building's systems. In the long-term, beneficial impacts would occur to the storm sewer system due to an increase in stormwater management on the site.

Mitigation Measures

The preferred selected developer, along with GSA, would coordinate with all utility service providers and the IRS Building prior to and during construction. This includes coordination with PEPCO and Washington Gas to ensure electrical and gas lines remain intact and are safe to work around.

The preferred selected developer, along with GSA, would consult with the DC Fire Marshall to ensure that access to fire hydrants and the building is maintained.

The preferred selected developer would also coordinate with DC Water to determine whether a preconstruction survey is necessary and for potential relocation of storm sewer inlets.

Preferred selected developer would be responsible for ensuring that any new or replacement street lighting would be in accordance with DC standards, and with NPS standards along Pennsylvania Avenue, NW and in conformance with the PADC Plan and related requirements.

Utility work may require disturbance of land along Pennsylvania Avenue (south and north sides) that is under NPS jurisdiction. GSA, along with the preferred selected developer, would coordinate with NPS regarding any necessary permits for utility work that would disturb land that is under NPS jurisdiction, but outside the area to be transferred from NPS to GSA.

Energy Use and Sustainability: Over the long-term, minor to moderate adverse impacts to energy use and sustainability would occur because of the increase in energy demand due to the change to a 24/7 hotel use. However, improvements in the buildings' operational energy efficiency would have long-term beneficial impacts on the property as a whole.

Mitigation Measures

None proposed, refer to the Final EA for a detailed description of sustainability and energy savings practices the preferred selected developer would incorporate into the design of the redevelopment of the OPO.

VI. SECTION 106 of the NATIONAL HISTORIC PRESERVATION ACT.

The OPO is individually listed in the National Register of Historic Places (NRHP), is a contributing element of the National Register-listed Pennsylvania Avenue National Historic Site and is listed individually in the District of Columbia Inventory of Historic Sites. The Annex is a non-contributing element.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), Federal agencies are required to consider the effects of any undertakings on districts, sites, buildings, structures, or objects included, or eligible for inclusion, in the NRHP. Federal agencies are also required to afford the Advisory Council on Historic Preservation (ACHP) a "reasonable opportunity to comment with regard to such undertaking."

Pursuant to 36 CFR Part 800, regulations implementing Section 106 of the NHPA (16 U.S.C. Section 470(f)), GSA has consulted with the DC SHPO, ACHP, other Signatory Parties, and Consulting Parties regarding the effects of the Undertaking and in the development of the Programmatic Agreement (PA) for the leasing, rehabilitation, ongoing maintenance and stewardship of the Old Post Office Building and Annex, and associated transportation improvements. Based upon the 35 percent design of the project, GSA, with the concurrence of the DC SHPO and the PA signatories, has determined the project will have no adverse effects on the Old Post Office Building or other historic properties. The NPS and NCPC have also participated in this process in compliance with their responsibilities under Section 106. The PA has been finalized and signed by GSA. GSA, along with the preferred selected developer, shall ensure that the measures outlined in the PA are carried out to avoid adverse effects. The PA has been included in the Final EA as Appendix 4.9.